

10
CLAIMS

1. A halyard system for suspending a flag to a flag pole, the halyard system comprising:

a holding member coupled to the flag pole configured to receive and secure a line member in a pre-determined position;

a line member operatively coupled to an upper side portion of the flag to extend through an upper portion of the flag pole to be removably coupled to the holding member; and

a weighted mass structure strategically coupled to the flag and operable to place tension on the line member and at least a portion of a peripheral side of the flag so as to substantially maintain the peripheral side of the flag in a taut suspended position along side the flag pole.

2. The halyard system of claim 1, wherein the flag pole comprises a tube member mountable to a base plate for housing the holding member and a substantial percentage of the length of the line member, the tube member having a cap mounted at an upper portion of the tube member.

3. The halyard system of claim 1, wherein the weighted mass structure is operable to maintain the tension in the line member to facilitate vertically lowering the flag along side the flag pole.

4. The halyard system of claim 1 wherein the weighted mass structure freely hangs from the flag and comprises a dense weighted material with a pre-determined weight having a constant gravitational force in a downward direction.

5. The mass structure of claim 4, wherein the weighted mass structure is coupled at a midsection of the peripheral side of the flag.

6. The mass structure of claim 3, wherein the weighted mass structure is coupled at an intersection of the peripheral side and a lower side portion of the flag.

7. The halyard system of claim 1, wherein the weighted mass structure comprises first and second magnetic structures configured for placement on opposing sides of the flag.

8. The halyard system of claim 1, wherein the weighted mass structure is retained in a hem of the peripheral side of the flag.

5 9. The halyard system of claim 1, further comprising a plurality of weighted mass structures coupled to the flag.

10 10. The halyard system of claim 1, wherein the weighted mass structure is operable to provide tension in the line member to maintain a coupling with the holding member.

11. The halyard system of claim 1, wherein the line member has a first terminal end and a second terminal end, the first terminal end connected to a coupling link for attaching to the upper peripheral side of the flag.

15 12. The halyard system of claim 1, wherein the holding member comprises a wedge-shaped aperture for selectively repositioning and securing the line member with an interference coupling.

20 13. The halyard system of claim 1, wherein the holding member comprises an aperture configured for unobstructed passage of the line member.

25 14. The halyard system of claim 13, wherein the line member has a positionable obstruction member coupled near a second terminal end to prevent the line member from passing completely through the aperture of the holding member.

15. The halyard system of claim 1, wherein the holding member comprises a bracket having a tapered slot defined therethrough operable to removably couple with the line member with an interference coupling.

30 16. The halyard system of claim 1, wherein the holding member is coupled to an inner surface of a tube member of the flag pole.

17. The halyard system of claim 1, wherein the holding member is a unitary structure with a first and second portion, the first portion configured to abut against an inner surface of a tube member of the flag pole.

5 18. The halyard system of claim 1, wherein the holding member is a unitary structure with a first and second portion, the second portion configured to extend outwardly from an inner surface of a tube member of the flag pole at a pre-determined angle.

10 19. The halyard system of claim 2, wherein the flag pole further comprises a cap configured to fit over the tube member and includes a channel configured to receive the line member.

15 20. The halyard system of claim 19, wherein a portion of the cap defining the channel has a surface defining the channel coated with a pre-determined substance to limit friction of the line member extending through the channel.

21. The halyard system of claim 19, wherein the cap further comprises rollers mounted within the channel to limit friction of the line member extending through the channel.

20 22. A method for suspending a flag to a flag pole, the method comprising:
coupling a holding member to the flag pole, the holding member configured to receive and secure a line member in a pre-determined position;
coupling the line member to an upper side portion of the flag and extending the line
25 member through an upper portion of the flag pole;
causing the line member to be releasably coupled to the holding member;
attaching a weighted mass structure to the flag to place tension on the line member and at least a portion of a peripheral side of the flag so as to substantially maintain the peripheral side of the flag in a taut suspended position along side the flag pole.

30 23. The method of claim 22, wherein the attaching comprises attaching a plurality of weighted mass structures.

24. The method of claim 22, wherein the attaching comprises coupling the weighted mass structure to a coupling link to suspend the weighted mass structure from the flag.

5 25. The method of claim 22, wherein the attaching comprises coupling opposing magnetic structures to the flag along the peripheral edge of the flag.

26. A locking door for an access opening in a flag pole configured to access a halyard system disposed internally in the flag pole, the locking door comprising:

10 a front door plate having a face surface and a back surface, the back surface having a radius of curvature configured to sit flush against an outer surface of the flag pole;

a rear door plate coupled to the back surface of the front door plate, the rear door plate having an outer periphery sized to be disposed within the access opening;

15 a lock housing having a front portion and a rear portion, the front portion exposed on the face surface of the front plate and having a key hole defined therein, the back portion protruding from the back surface of the front door plate; and

a locking extension member having a middle portion coupled to the rear portion of the lock housing and opposite free end portions extending from the middle portion, the locking extension member being operable to selectively lock and unlock the locking door.

20 27. The locking door of claim 26, wherein the front door plate is sized to cover the access opening and the exposed fasteners used to fasten the holding member to the tube member within the flagpole.

25 28. The locking door of claim 26, wherein the rear door plate is contoured to coincide with the contoured back surface of the front plate.

29. The locking door of claim 26, wherein the locking extension member can be rotated to a locked position by inserting a key into the keyhole located on the outer surface of the locking door and positioning the locking extension member so the free ends are disposed horizontally against the inner surface of the flag pole with an interference fit.

30 30. The locking door of claim 26, wherein the locking extension member can be rotated to an unlocked position by inserting a key into the keyhole located on the outer

surface of the locking door and positioning the locking extension member so the free ends are disposed vertically preventing interference with the inner surface of the flag pole.

5

10